# FIRE AND LIFE SAFETY REQUIREMENTS FOR CONVENTIONS, TRADE SHOWS AND EXHIBITS

November 2011, Updated March 2012

# **COLORADO SPRINGS FIRE DEPARTMENT**

**Division of the Fire Marshal** 



If you have any questions or comments regarding the information contained within, or if you need assistance interpreting these requirements, please contact:

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### Scope

This document is intended to be used by those facilities which have the ability to hold indoor exhibitions, trade shows and similar events or any facility holding an A-2 or A-3 Occupancy classification able to hold such events. Examples of facilities that fall into this category included but not limited to event centers, hotels with meeting/conference rooms and arenas.

## **Purpose**

The purpose of this document is to provide the facility, event promoters, sponsors and vendors guidelines in terms of fire and life safety features required at all shows. For questions regarding anything not covered within this document, please contact the Division of the Fire Marshal (DFM).

## **Permits and Inspections**

Facilities part of the Colorado Springs Fire Department A-Occupancy Annual permit program do not need to pull a permit for a typical show. However, any show incorporating a special activity will require a special permit. See following section.

Facilities that are not part of the annual permit program must obtain a permit prior to each show. In order to obtain this permit, the following information must be submitted:

- Completed permit application
- Name of event
- Address of location for the event
- Dates and times of event
- Occupant load posted in areas used for the event as well as anticipated occupant loads for all areas
- Floor plan of all areas in which the event will encompass
- Locations of all booths, exhibits, etc either drawn to scale or provided with dimensions labeled with vendor/exhibitor business name
- Locations of all exits
- Aisle widths either drawn to scale or provided with dimensions
- Locations of lobbies and intended uses contained within
- Locations of all fire protection equipment (extinguishers, hose valves, hose cabinets, fire alarm pull stations, etc.)
- Information regarding flame retardant treatment for all materials
- Locations of all cooking activities along with cooking methods (except kitchen areas that are part of the facility)

The permit application is found at the following link: <a href="http://bit.ly/svz7Pf">http://bit.ly/svz7Pf</a> or <a href="http://www.springsgov.com/units/fire/Packets/IFC2009">http://www.springsgov.com/units/fire/Packets/IFC2009</a> Non-%20Hazardous Materials Permit Application.pdf

## **Special Permits**

Special permits for the specific use of a particular activity are required. These special activities include but are not limited to the following:

- Fireworks
- Pyrotechnics
- Flame effects
- Open flames
- Tents, canopies and similar structures > 2400 square feet
- Flammable or combustible liquids
- Compressed gases
- LP Gas

For questions regarding special permits during an event, contact the Division of the Fire Marshal.

## Fire Safety and Evacuation Plans

A fire safety and evacuation plan is required in all A-occupancies except those used exclusively for religious worship and have an occupant load less than 2000.

Fire safety and evacuation plans must include the following information:

- Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
- Procedures for employees who must remain to operate critical equipment before evacuating.
- Procedures for assisted rescue for persons unable to use the general means of egress unassisted.
- Procedures for accounting for employees and occupants after evacuation has been completed.
- Identification and assignment of personnel responsible for rescue or emergency medical aid.
- The preferred and any alternative means of notifying occupants of a fire or emergency.
- The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
- Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
- A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided. The procedure for reporting a fire or other emergency.
- The life safety strategy and procedures for notifying, relocating or evacuating occupants, including occupants who need assistance.

Site plans indicating the following:

- The occupancy assembly point
- The locations of fire hydrants
- The normal routes of fire department vehicle access

Floor plans identifying the locations of the following:

- **Exits**
- Primary evacuation routes
- Secondary evacuation routes
- Accessible egress routes
- Areas of refuge
- Exterior areas for assisted rescue
- Manual fire alarm boxes
- Portable fire extinguishers
- Hose valve/standpipe stations
- Fire alarm annunciators and controls
- A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
- Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
- Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard

Fire safety and evacuation plans must initially be approved by the Division of the Fire Marshal. The plans must be reviewed and updated by the facility annually or as necessitated by changes in staff assignments, occupancy or the physical arrangement of the building. Plans need to be resubmitted to the Division of the Fire Marshal only when significant changes to the plans have occurred.

# **Crowd Managers**

Trained crowd managers shall be provided for facilities or events where more than 1000 persons congregate. The minimum number of crowd managers shall be established at a ratio of one crowd manager to every 250 persons. Where approved by the Fire Marshal, the ratio of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an approved automatic fire sprinkler system or based upon the nature of the event.

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## **Open Flames**

The use of open flames, fire or burning during exhibits, trade shows conventions, etc is prohibited unless a permit for the use of such devices is obtained from the Division of the Fire Marshal.

To obtain an open flame permit, download the permit application at <a href="http://bit.ly/svz7Pf">http://www.springsgov.com/units/fire/Packets/IFC2009\_Non-%20Hazardous\_Materials\_Permit\_Application.pdf</a> and contact to the Division of the Fire Marshal.

## **Lobby Areas**

Lobbies serve as exit access. Registration booths are permitted within lobbies and shall not impede required access. Vendor booths, exhibits, etc are not permitted in lobby areas.

#### **Exhibit Booths**

Travel distance within exhibit booths or exhibit enclosures to an exit aisle shall not exceed 50 feet. The upper deck of multilevel exhibits exceeding 300 square feet shall have not less than two remote means of egress.

# **Single Station Smoke Alarms**

Single station smoke alarms shall be installed in all enclosed exhibits exceeding 300 square feet with roofs. Single station smoke alarms shall be installed on all covered levels of multilevel exhibits/booths exceeding 300 square feet in ceiling space.

#### **Exits and Aisles**

Exit doors shall not be blocked in any manner at any time. Exit doors shall be kept clear from obstructions that would prohibit or limit their full use and movement and shall not be blocked open unless normally permitted.

Aisle widths shall provided sufficient egress capacity for the number of persons accommodated by the catchment area served by the aisle. Aisles shall be kept clear from obstructions at all time and shall be kept uniform throughout. Aisles shall lead towards exits or exit access doorways and shall be provided such that the travel distance to an exit door from any point within the event space is not more than 250 feet for sprinklered buildings.

## **Seating**

Seats in assembly occupancies (general sessions) that provide seating for more than 200 persons, must be securely fastened to the floor. As an alternative to securing seats to the floor, seats totaling more than 200 may be fastened together in groups of not less than three.

# Fire Protection Equipment

Curtains, drapes, screens, posters, etc. must not obstruct exit signage. Exit signage must be visible from any location within the event space. If exit signage is obstructed from view, temporary exit signage must be provided. Obstructions to sprinkler discharge patterns must be kept a minimum of 18-inches below the sprinkler deflector. Fire alarm horn/strobe units must be kept clear from obstructions at all times. Fire alarm strobe units must be visible from any location within the event space at all times. Fire alarm pull stations must be visible and accessible at all times. Fire hose valves (standpipes) must be kept clear from visibly and physical obstructions at all times. Fire department connections must not be obstructed either visibly or physically at any time.

## Fire Extinguishers

Portable fire extinguishers shall not be obstructed or obscured from view. In rooms or areas in which visual obstruction cannot be completely avoided means shall be provided to indicate the locations of extinguishers. Class K extinguishers must be provided for any cooking that involves frying. All fire extinguishers whether within the facility normally, or brought within the facility by vendors must be currently inspected and tagged by a licensed fire suppression contractor.

#### Flame Resistance of Decorative Materials

Documents of flame resistance criteria must be available for review by the fire inspector.

Curtains, drapes, hangings and other decorative materials suspended from walls or ceilings shall meet the requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films. Artificial decorative vegetation shall meet the requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films. Screens upon which motion pictures (or presentations) are projected shall meet requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films or comply with requirements for a Class B interior finish in accordance with the 2009 International Building Code. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.

#### **Motorized Vehicles**

Motorized vehicles are permitted to be displayed within the building provided all vehicles meet the following requirements:

- Batteries are disconnected
- Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (whichever is least)
- Fuel tanks and fill opening are closed and sealed to prevent tampering.
- Vehicles, boats or other motor craft equipment are not fueled or defueled within the building.

#### **Extension Cords**

Extension cords shall be grounded when serving grounded appliances and maintained in good condition without splices, deterioration or damage. Extension cords shall be plugged directly into an approved receptacle (not into another extension cord) and shall not be affixed to structures, extend under floor coverings, through walls or doors, and across areas of foot traffic. Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact. Extension cords shall be used only with portable appliances and the ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

## **Cooking/Warming Devices**

Open flame cooking appliances shall not be used within the event. "Sterno" type warming trays are permitted. Cooking within exhibit spaces shall be limited to electric appliances only. Electrically powered fry pots are permitted. All electric cooking appliances shall be approved by a recognized testing laboratory (UL, FM, etc) Open flame cooking appliances are permitted to be used outside in accordance with the Colorado Springs Fire Code.

#### **Outside Areas**

Fire apparatus access roads (fire lanes), shall not be obstructed in any manner, including the parking of vehicles. However, the un/loading of vehicles may be permitted in fire lanes provided the vehicle is not left unattended for any length of time. Fire department connections must not be obstructed either visibly or physically at any time. All building exits are required to have their discharge areas free and clear of obstructions so as to provide direct and unobstructed access from the exit discharge to the public way.

# Flammable/Hazardous Materials

The following items shall be prohibited within trade shows, exhibits, conventions, etc:

- Compressed flammable gases
- Flammable or combustible liquids
- Hazardous chemicals or materials
- Class II or greater lasers, blasting agents and explosives

Certain hazardous materials may be permitted for use during such events once an applicable permit is obtained. Contact the Division of the Fire Marshal for additional information.

#### **Combustible Materials**

Combustible materials shall not be stored in exits or exit enclosures. Combustible materials within exhibit booths shall be limited to a one-day supply. Storage of combustible materials behind the booth shall be prohibited.